REMARKS

Reconsideration and allowance of the subject application are respectfully requested. By this Amendment, Applicant has amended claims 9 and 10. Therefore, claims 1, 2, 4-12, 14 and 15 are all the claims pending in the application. This Amendment addresses each point of rejections raised by the Examiner and Applicant respectfully traverses all the rejections.

Claim Objections

Applicant thanks the Examiner for pointing out an informality in claim 10. Applicant has amended claim 10 to correct the informality.

Claim Rejections - Claims 1-2, 4-9, 12, 14 and 15

Claims 1, 2, 5, 7, 9, 12, and 14 are rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Chimoto et al. (U.S Patent No. 5,838,383; "Chimoto").

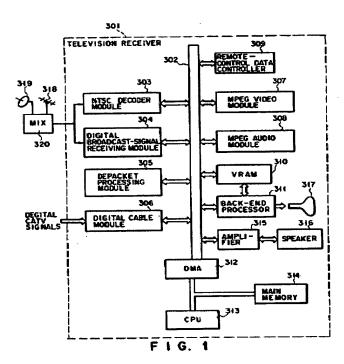
Claim 1 recites, inter alia, "wherein each of the connectors of the backplane includes: a transmission signal line for a transmission signal for transmitting a control command of the main board to the extension board; an MPEG transport stream line for an MPEG transport stream; an analog audio/video signal line for an analog audio/video signal; and a selection signal line for a selection signal for selecting the extension board."

As such, plain reading of claim 1 necessarily requires that both the "extension board" and the "main board unit" of claim 1 to carry the four signal lines noted above. That is, in claim 1,

connectors are plainly recited as connecting the individual boards to the backplane, and therefore, connectors themselves cannot be reasonably read as being the backplane.

The Examiner asserts that the above-noted features of claim 1 broadly read on Chimoto (See Office Action: page 11). Applicant respectfully disagrees. The Examiner seems to be basing his assertion on the point that the "bus" described in Chimoto carries various signals (See Office Action: page 11, "The bus carries various signals, e.g. 'transmittal signal', a 'MPEG transport stream', an 'analog audio/visual signal', and a 'selection signal', to other modules on the bus.").

While signals of differing type travel through the *bus 302*, as shown below in Figure 1 of Chimoto, each of the modules 303-316 is specifically contemplated to perform a specific function, and therefore, each of the modules *do not* include multiple signal lines of different type, as recited in claim 1. (See Chimoto: col. 7, line 30 - col. 8, line 52).



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For instance, there is no disclosure or suggestion in Chimoto that the digital broadcast-signal receiving module 304 would have "an analog audio/visual signal line for an analog audio/visual signal," as recited in claim 1. Such is due to the fact that the module 304 is specifically contemplated to receive digital broadcast signals (See Chimoto: col. 8, lines 6-10). Therefore, Applicant respectfully submits that Chimoto fails to disclose or suggest the noted features of claim 1.

In view of the foregoing, Applicant respectfully submits that claim 1 is patentable over Chimoto. Further, Applicant respectfully submits that independent claim 2 is patentable over Chimoto based on the rationale analogous to those discussed with respect to claim 1. With respect to dependent claims 5, 7 and 9, Applicant respectfully submits that claims 5, 7 and 9 are patentable by virtue of their dependency from claim 1 or 2.

Claim 4 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Chimoto.

Applicant respectfully submits that claim 4 is patentable over Chimoto based on the rationale analogous to those discussed with respect to claim 1.

Claims 6 and 9 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Chimoto in view of Trovato et al. (U.S Patent No. 6,469,742; "Trovato"). Trovato simply lacks a backplane including a plurality of connectors. Applicant respectfully submits that Trovato fails to make up for the noted deficiencies of Chimoto discussed above, and therefore, submits that claims 6 and 9 are patentable over Chimoto in view of Trovato.

Claims 8 and 15 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Chimoto in view of Battini et al. (U.S Patent No. 6,919,792; "Battini"). Battini generally relates

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to a method of controlling household devices, and therefore fails to disclose or suggest the backplane carrying multiple signal lines of different type. Applicant respectfully submits that Battini fails to make up for the noted deficiencies of Chimoto discussed above, and therefore, submits that claims 8 and 15 are patentable over Chimoto in view of Battini.

Claim Rejections - Claims 10 and 11

Claim 10 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Trovato in view of Whetsel (U.S Patent No. 5,497,379; "Whetsel").

The Examiner asserts in a single conclusionary sentence that "it would have been obvious to one with ordinary skill in the art at the time of the invention was made to modify the system disclosed by Trovato to also sequentially scan the connectors, as taught by Whetsel, in order to verify if the modules are still active and present over a period of time" (See Office Action: page 10). Applicant respectfully disagrees and submits that the Examiner fails to identify the requisite suggestion or incentive that would have motivated an artisan ordinarily skilled in the art to modify a reference or to combine references in the manner proposed by the Examiner (See: *In re Fine*, 837 F.2d 1071, 1074 (Fed. Cir. 1988)).

"In determining the propriety of the Patent Office case for obviousness in the first instance, it is necessary to ascertain whether or not the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the reference before him to make the proposed substitution, combination, or other modification" (See: MPEP § 2143.01). The prior

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art must be considered in its *entirety*, including disclosures that teach away from the claims (See: MPEP §§ 2141.02, 2145(X)(D)).

Applicant further points out that the modifications to Trovato proposed by the Examiner "cannot change the principle of operation of the primary reference or render the reference inoperable for its intended purpose (See MPEP §§ 2143.01, 2145(III) and (X)(D)).

The primary reference Trovato generally relates to an upgradeable television which includes a plurality of modules 16 providing operating functions for the upgradeable television, as shown below in Figure 1 of Trovato. As such, Trovato describes that each of the modules 16 identifies itself to the processor (See Trovato: col. 1, lines 57-60).

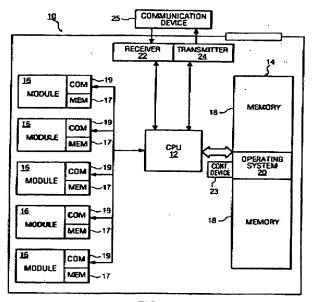


FIG. 1

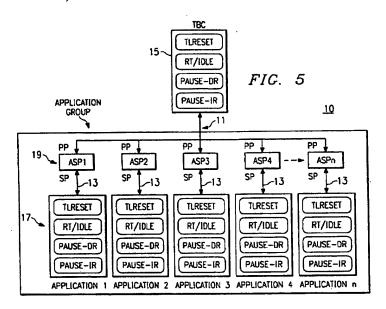
On the other hand, the secondary reference Whetsel describes a system and method for selectable parallel execution of test operations. To that end, Whetsel employs a test bus controller TBC 15 to select a plurality of applications 17 associated with a given test bus 11, as

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shown below in Figure 5 of Whetsel. That is, in Whetsel, TBC 15 handles the selection of the

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3, lines 56-59; col. 7, lines 65-67).



applications 17 to simultaneously execute test operations in a unified fashion (See Whetsel: col.

As such, in the present 35 U.S.C. § 103 (a) rejection based on Trovato in view of Whetsel, the Examiner's citation of Whetsel for the verification of the boards in the backplane by the bus controller 15 will *necessarily* involve incorporating the structure of the system test configuration 10 with TBC 15 and the plurality of applications 17, as shown above (See Whetsel: col. 14, 59-67).

However, as mentioned previously, the primary reference Trovato is pertinent to an upgradeable television set. The simultaneous testing of applications described in the secondary reference Whetsel is simply not an aspect of the system described in Trovato, and there is *no* description of a simultaneous testing of a plurality of applications mentioned in Trovato. As such, Applicant respectfully submits that one ordinarily skilled in the art would not have been

motivated to modify Trovato with Whetsel to incorporate features of Whetsel which deal with a simultaneous testing of applications.

Further, Applicant respectfully submits that modifying Trovato with Whetsel meaningfully changes the principle of operation of the primary reference Trovato. Trovato already describes that the modules 16 directly identify themselves to the operating system 20 (See Trovato: col. 4, lines 29-32, "At startup or power up, each hardware component (module 16) and software component (software module 18) which is connected to CPU 12 identifies itself [emphasis added] to operating system 20."). In fact, Trovato clearly states that "each module is capable of identifying itself to the processor" (See Trovato: col. 1, lines 59-60; col. 3, lines 1-3). Therefore, Applicant respectfully submits that modifying Trovato with Whetsel in order to have TBC 15 of Whetsel to verify the presence of components will render the self-identifying aspect of the components of Trovato moot and pointless.

Furthermore, since the modules 16 described in Trovato already have such self-identifying features, modifying Trovato with Whetsel in order to have the TBC 15 to verify the presence of the components would be largely *redundant*. Trovato already sets out in detail how the modules 16 would be identified, and as such, Applicant respectfully submits that one ordinarily skilled in the art would not have been motivated to modify Trovato with Whetsel, as asserted by the Examiner.

For all the foregoing reasons, Applicant respectfully submits that there is no motivation to combine the elements of prior art in the manner suggested by the Examiner. The only reason an artisan ordinarily skilled in the art would combine Trovato with Whetsel in the manner

suggested by the Examiner is through acquiring knowledge of Applicant's invention. Such hindsight reconstruction is clearly impermissible (See MPEP § 2145 X. A.).

In view of the foregoing, Applicant respectfully submits that claim 10 is patentable over Trovato in view of Whetsel.

Claim 11 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Trovato in view of Whetsel, and further in view of Battini et al. (U.S Patent No. 6,919,792; "Battini").

Applicant respectfully submits that Battini fails to make up for deficiencies of Trovato in view of Whetsel, as set forth above with respect to claim 10. Therefore, Applicant respectfully submits that claim 11 is not rendered obvious by the proposed combination of Trovato in view of Whetsel, and further in view of Battini.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Amendment Under 37 C.F.R. § 1.111

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Respectfully submitted,

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